but it was a badly mangled individual. It would seem, therefore, that this form is not so very rare in this locality, although we should expect it to be very scarce on account of the peculiarity of its origin. Of the peroneurous *Papilio machaon* aberration, above mentioned, I secured two specimens from only 75 pupæ, which is also a proof that peroneurous aberrations can develop with comparative ease, though the conditions for such development are still unknown.

Mr. Bartsch very generously presented me with the interesting specimen of Argynnis and I have placed it in the collection of the Bussey Institution. In honor of the discoverer I would name this peroneurous aberration, Argynnis cybele Fabr. forma Bartschi. Its diagnosis would be the following:

Alarum venæ post mediam ad extremam partim immaturæ vel obsoletæ; propterea macularum seriebus omnibus in vittis confluentibus; ubivis venæ partim vel omnino obsoletæ sunt. Alæ contractæ, propterea aspectu aliquantum productæ.

Type:  $1 \circlearrowleft$  in the collection of the Bussey Institution.

## GEOMETRID NOTES.

A NEW VARIETY OF NYCTOBIA.

By L. W. Swett. Boston, Mass.

Nyctobia limitaria Walk., reiffi var. nov.

Exp. 25 mm., palpi short, white typed body and thorax ash gray, antennæ black and white ringed. Fore wings ash gray, first a reddish brown basal band running outward below costa in a strong curve to median vein where it recurves to inner margin. Beyond this is a pale gray space 3 mm. wide where there is a broad chest-nut brown band running from costa to inner margin, the inner edge of which is very irregular, the black linear discal spot is just visible, the extra discal edge of this band is bent outwards below costa at discal spot and inward towards inner margin, beyond this the wing is pale ash and two faint brown hair lines run brokenly to inner margin. Twin dots at ends of veins in the long ashen gray fringe. Hind wings light ash with a faint extra discal brown band, below which the wing is lighter. The fore wings beneath are light ashen with band showing through faintly the discal dot is black, and appears on hind wings also, which are same as fore

wings only there is a trace of two bands beyond discal spot. This variety can be told at a glance by the striking red-brown band across fore wings making it resemble slightly Xanthorliöe ferrugata.

This beautiful variety was given me by my kind friend, Mr. William Reiff, who took it in Forest Hills on the hemlock, together with two intermediate forms of the same variety.

Type: 1 ♀; April 5, 1910, Forest Hills, Mass.

## ETHOLOGICAL NOTES ON *ELAPHRUS CICATRICOSUS*LEC. (COLEOPTERA)

By C. A. Frost.

A few words on the occurrence of this rare species of Carabidæ may enable some other collector to profit by my experience if they have plenty of time and patience.

My first specimen was taken at Monmouth, Me., in 1907 (about June 20) on the shore of a lake near the mouth of a small brook. I was sifting a pile of washed-up debris for Staphylinidæ when I noticed it running on the mud near where I had been standing. A careful search failed to discover any more at that time and each summer since, although I have even dammed up the brook in the hope of flooding out a specimen. The cause of its disappearance in this place is probably the removal of a heavy growth of alders that extended down to the edge of the water.

On June 23, 1910, after working this locality in vain, it occurred to me to explore a cold swamp about a mile further up the lake. This swamp, which is never dry, is traversed by a clear trout brook fed by springs and it is so heavily wooded that the sunshine penetrates into it hardly at all. In some places the mud is very deep and is covered more or less thickly with swamp grasses, dead limbs and logs.

I began operations here with a rusty pint dipper which I picked up at the spring, and almost the first dipperful of water brought out a specimen of Elaphrus from a slight hollow near the brook. It was *cicatricosus*, and for an hour or more I worked the old dipper–until the bottom fell out–without success. I now think